

APRIL/MAY 2024

**23PCS12 — OBJECT ORIENTED ANALYSIS
AND DESIGN AND C++**

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. List some First generation languages.
2. What is Action abstraction?
3. Define Aggregation
4. What is Cardinality?
5. What are two ways of creating Symbolic constants in C ++?
6. What is Dynamic Binding?
7. Define Tokens.
8. What are two ways of writing comments in C++.
9. What are C++ streams?
10. What is meant by Encapsulation?

SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL the questions.

11. (a) Distinguish between Object-oriented programming and object-oriented design.

Or

- (b) Explain the various kinds of Relationships among objects.

12. (a) Explain the Nature of a class.

Or

- (b) Explain the importance of Proper classification.

13. (a) Explain the User-defined data types.

Or

- (b) Explain the Friend function with a suitable example.

14. (a) Write a short note on Copy constructor.

Or

- (b) Give an account on Single inheritance.

15. (a) Discuss the pure virtual functions with an example.

Or

- (b) Write a C++ program for Matrix Multiplication using Operator Overloading.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Explain the evolution of the object model.

17. Discuss the Relationship among classes.

18. Explain the following (a) multilevel inheritance (b) Hierarchical inheritance.

19. Explain the various types of Expressions in C++.

20. Explain in detail about Type conversions in C++.